

Subsidiary Legislation made under s.24.

## **Weights and Measures Regulations**

**LN.1978/025**

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Prescribed Limits of error on the testing of Weighing Instruments.

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#### PART I.—GENERAL.

##### Title.

1. These regulations may be cited as the Weights and Measures Regulations.

##### Interpretation.

2. In these regulations, unless the context otherwise requires,—

“automatic weighing machine” means a machine in which special self-acting machinery is introduced to effect an automatic feed, the rapid weighing of giving loads, the registration and summation of loads and other similar purposes or some of them;

“beam scale” means any equal-armed weighing instrument, the pans of which are below the beam;

“capacity” means, in relation to a weighing instrument, the maximum load which the instrument is constructed to weigh;

“counter machine” means any equal-armed weighing instrument of a capacity not exceeding 50 kilogrammes, the pans of which are above the beam, and includes, together with the ordinary type, such instruments as are specially designed for counter use, and which do not exceed the said capacity;

“dead-weight machine” means any weighing instrument similar in principal of construction to a counter machine but of a capacity of 50 kilograms or more, and includes—

- (a) such an instrument with the weighing platform near to the ground and with connection stays or hooks above the beam and commonly known as a low pattern machine or cotton machine;
- (b) such an instrument with the weighing platform at any convenient height and with the connecting stays or hooks below the beam, and commonly known as a high pattern or single machine;
- (c) such an instrument which combines the characteristics of the instruments in (a) and (b) above, and commonly known as a double machine;

“error”, in relation to a weighing instrument, includes deficiency insensitiveness;

“weighing instrument” means any weighing equipment other than a weight or counterpoise.

**Application.**

3. These regulations shall apply to all weighing and measuring equipment for use for trade.

**Inspection and testing of weighing and measuring equipment.**

4. Weighing or measuring equipment submitted for testing shall be clean and complete in itself, and shall not bear any mark which might be mistaken for an inspector's stamp and measuring equipment.

**Passing as fit for use for trade.**

5. No weighing or measuring equipment shall be passed as fit for use for trade unless it conforms with these regulations and is made in accordance with an approved pattern or has been granted a certificate under section 9 of the Act.

**Stamping.**

6. Where practicable weighing and measuring equipment shall be stamped with the inspector's stamp on a plug or stud of soft metal, such plug or stud being made irremovable by undercutting or otherwise.

**Obliteration of stamps.**

7.(1) An inspector shall obliterate the stamp on any weighing or measuring equipment, which falls outside the prescribed limits of error specified in Schedule 1 or Schedule 2.

(2) An inspector shall obliterate the stamp on any weighing or measuring equipment, which has been altered, adjusted or repaired.

(3) Stamps shall be obliterated by an inspector, in accordance with the requirements of these regulations, by means of punches of a six-pointed star design as shown in regulation 31 of the Measuring Instruments (Liquid Fuel and Lubricants) Regulations,

**PART II.—LINEAR MEASURES.**

**Materials and principles of construction.**

8.(1) Linear measures shall be—

(a) straight and free from flaws; and

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- (b) made of steel, brass, aluminium alloys, ivory laminated bakelite, reinforced fibreglass, hardwood, woven tape or any other material approved by the Consumer Protection Officer.

(2) Measures of one metre or more shall, if made of wood, have both ends tipped with metal and the tips shall be riveted through the wood.

#### **Subdivided measures.**

9. Subdivided measures shall be graduated clearly and indelibly and the numbered graduations shall be marked by longer lines than the graduations which are not numbered. The maximum purported value shall be conspicuously, legibly and durably marked at one end of the measure, either in full or by means of a prescribed abbreviation.

#### **Testing.**

10. Linked measures and riband or tape measures shall be tested when subjected to a tension or pull as follows :-

- |  |      |
|--|------|
| (a) riband or tape measures made of material other than metal; | 1 kg |
| (b) riband or tape measures made of metal;                     | 4 kg |
| (c) linked measures,   | 6 kg |

and the measure under test shall be supported throughout its whole length on a plane and even base.

#### **Margin of error.**

11. No linear measure shall be passed as fit for use for trade unless the error, if any, thereof is less than that prescribed in Part I of Schedule 1.

#### **Stamping.**

12. Linear measures shall be stamped near one end or, in the case of subdivided measures, near the beginning of the scale on each graduated side:

Provided that in the case of linked measures and riband and tape measures, the stamp may be placed on metal label or disc permanently attached to the measure or on the handle thereof.

### **PART III.-LIQUID CAPACITY MEASURES.**

**Materials.**

13. Liquid capacity measures shall be made of aluminium alloys, copper, copper alloys, earthenware, enamelled-metal, glass, nickel alloys, plated, tinned or galvanized iron or steel, stainless steel, tin alloys, formaldehyde plastic or vulcanite, or any other material approved by the Consumer Protection Officer.

**Composition of pewter etc. measures.**

14. Measures made of pewter or of other tin alloys shall contain at least 80 per cent by weight of tin, and shall not contain more than 10 per cent by weight of lead. All such measures shall bear the name and address of the maker on the underside of the bottom of the measure.

**Copper, etc., measures.**

15.(1) Measures made of copper or copper alloys shall be well tinned all over the inside; on plated measures the coating shall show no signs of peeling.

(2) Measures bearing strengthening ribs or bands shall not have those ribs or bands positioned in such a way that they might reasonably be mistaken for graduations.

**Prevention of spilling.**

16. If measures have their maximum purported values clearly defined, they may have a top rim, lip or retaining edge to prevent spilling:

Provided that the top rim, lip or retaining edge shall not increase the capacity of the measure by more than 10 per cent of its maximum purported value.

**Construction of liquid capacity measures.**

17. No liquid capacity measure shall be so constructed that—

(a) it has a false bottom; or

(b) it does not completely empty when tilted to an angle of 120 degrees from the vertical.

**Glass measures.**

18. Measures made of glass, other than apothecaries measures, shall have their maximum purported values defined either—

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- (a) by the brim of the measure; or
- (b) by a line not less than 5 cm in length and distant not less than 1 cm nor more than 4 cm from the brim.

#### **Earthenware measures.**

19. Measures made of earthenware shall have their maximum purported values defined either—

- (a) by the brim of the measure; or
- (b) by an indelible line marked on the inside of the measure and the distance from the bottom of the line to the brim shall not be more than 2 cm.

#### **Use for measure of lesser quantity.**

20.(1) Subject to sub-regulations (2) and (3), any liquid capacity measure above the purported value of 2½ litres may be used for trade by means of any division or sub-division marked thereon as a capacity measure of any lesser quantity.

(2) In the case of measures made of glass which are sub-divided by graduations, the total number of graduations on the measure shall be marked thereon and all graduations shall be marked by clearly defined lines, which shall—

- (a) in the case of measures of 5 litres or less (other than apothecaries measures), be not less than 2½ cm in length; and
- (b) be not less than 2 mm apart.

(3) In the case of measures made of metal, which are subdivided by graduations shall be marked by clearly defined lines.

#### **Value to be marked.**

21.(1) Every liquid capacity measure shall have its maximum purported value conspicuously, legibly and durably marked on the outside of the body of the measure either in full or properly abbreviated.

- (2) The maximum purported value shall be marked—
  - (a) on glass measures where that value is defined by a line, at the line;

- (b) on measures made of enamelled-metal, in a distinctly different colour from that of the body of the measure;
- (c) on measures made of sheet metal, by means of embossing, engraving or impressing on the body of the measure or on a slip of tin or on a shield securely soldered to the measure.

**Apothecaries measures.**

22. Apothecaries measures which are subdivided shall be made of glass and shall be of conical or cylindrical shape.

**Testing.**

23.(1) Liquid capacity measures shall be tested by transferring water from the local or working standard into the measure under test.

- (2) Liquid capacity measure—
  - (a) with a lip or rim, shall be tested to the bottom of the lip or rim;
  - (b) on which the purported value is defined by a line, shall be tested to the bottom of the line and, in the case of measures made of glass, shall be tested by taking the level of the water at the bottom of the meniscus.

**Margin of error.**

24. No liquid capacity measures shall be passed as fit for use in trade unless the error, if any, is less than that prescribed in Part II of Schedule 1.

**Stamping.**

25. The stamp shall be placed on liquid capacity measures as follows:—

- (a) the measures made of glass, earthenware, enamelled-metal, urea formaldehyde plastic or vulcanite, it shall be etched or sandblasted beneath or near to the indication of the purported value on the outside of the measure;
- (b) on measures made of metal (other than enamelled-metal) which are subdivided, it shall be placed both on solder affixed to the inside strips or tablets near to the top-most graduation and also on the outside of the measure near to the indication of the purported value;

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- (c) on measures made of metal which are not subdivided and which have no lip or rim, it shall be placed near to the indication of the purported value on the outside of the measure;
- (d) on measures made of metal (other than enamelled-metal) which are not subdivided but which have a lip or rim, it shall, as far as practicable, be placed on the bottom of the inside of the lip or rim;
- (e) on measures other than those specified in the preceding subparagraphs of this regulation, it shall be placed on a plug or stud of soft metal provided for such use.

#### **PART IV.–DRY CAPACITY MEASURES.**

##### **Materials.**

26.(1) Dry capacity measures shall be made of aluminium alloys, copper, copper alloys, plated, tinned or galvanized steel or iron, stainless steel or well-seasoned wood, or of any other material approved by the Consumer Protection Officer.

- (2) Measures made of wood shall not be turned from the solid nor made of sappy wood.

##### **Shape.**

27. Dry capacity measures shall be of cylindrical shape, with the internal diameter approximately equal either to the depth, or to twice the depth, the difference between the internal diameter and the depth being not greater than 5 per cent of the depth or twice the depth respectively.

##### **Strengthening.**

28. Measures of purported value of 5 litres or more and made of wood shall be bound or strengthened with metal or wooden straps or hoops.

##### **Value to be marked.**

29. Dry capacity measures shall have their purported values marked thereon in like manner as they are marked on liquid capacity measures, except that –

- (a) in the case of measures made of wood (other than measures made of wicker or other open material), the values shall be marked by branding;

- (b) in the case of measures made of wicker or other open material, they shall be marked on a brass tablet or plate fastened to the measure by means of copper wire, or by branding on a tablet of wood securely worked into the side of the measure.

**Testing.**

30.(1) Dry capacity measures (other than measures made of wicker or other open material) shall be tested either with water or in the following manner with rape seed—

- (a) the corresponding standard shall be filled from a hopper, a vertical distance of 15 cm being left between the bottom of the hopper and the top of the standard;
- (b) the seed shall then be returned to the hopper and thence run from the hopper into the measure under test keeping a similar distance of 15 cm between the bottom of the hopper and the top of the measure;
- (c) the seed shall be levelled by means of a strike being swept across both the standard and the measure as quickly and lightly as possible.

(2) Measures made of wicker or other open material shall be similarly tested by means of cereals of the smallest size practicable.

**Margin of error.**

31. No dry capacity measure shall be passed as fit for use in trade unless the error, if any, is less than that prescribed in Part II of Schedule 1.

**Stamping.**

32.(1) Dry capacity measures made of metal shall be stamped near the brim and close to the indication of the purported value. Where necessary, such measures shall be provided with a plug of soft metal to receive the stamp.

(2) Measures made of wood (other than measures made of wicker or other material) shall be branded on the outside close to the indication of the purported value and also in the inside angle at the bottom of the measure.

(3) Measures made of wicker or other open material shall be stamped on a tablet, plate or fastening affixed in such manner that it cannot be removed without defacing the stamp.

**PART V.—WEIGHTS.**

**Materials.**

33. Flat or wire type weights shall be made of gold, platinum or aluminium or of an alloy of any of those metals or of a metal of a density of not less than 7 nor more than 9.5 grammes per cubic centimetre; other types of weights shall be made of a metal of a similar density.

**Shape.**

34.(1) Weights shall be of a type or form shown in the following table—

Type or Form	Weights which may be of that type or form
1. Metric weight (other than carat (metric) weights— (i) rectangular (ii) cylindrical (iii) hexagonal (iv) disc (v) flat (vi) wire	Weights of 5 kg or more  Weights of not more than 10kg nor less than 20g and of 10, 5, 2 and 1g. Weights of not more than 2kg nor less than 100g. Weights of not more than 20g nor less than 1 g. Weights of not more than 1 g nor less than 10mg. Weights of 50mg or less
2. Carat ( metric) weights— (i) cylindrical with a knob (ii) flat (iii) wire	Weights of 5 C.M. or more.  Weights of not more than 20 C.M. nor less than 0.05 C.M. Weights of 0.25 C.M. or less.
3. Imperial weights (other than grain weights and troy weights)— (i) bell, bar flat-circular or ring (ii) octagonal	Any weight other than a weight of 50, 20, 10, or 5lb. Weights of 50, 20, 10 or 5 lb.
4. Grain weights flat or wire	All grain weights.
5. Troy weights—	

<p>(i) cylindrical with a knob (ii) flat or wire</p>	<p>Weights of 1 oz tr or more. Weights of 0.5 oz tr or less.</p>
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(2) A weight with one or more edges chamfered or rounded shall be allowed.

(3) In the rectangular form the length of the weight at the top and the length at the bottom may differ by an amount which does not exceed 5 per cent of the smaller length, and the width of the upper surface and the width of the lower surface may differ by an amount which does not exceed 10 per cent of the smaller width.

(4) In the cylindrical form of weight the horizontal section shall be circular, and, taking a vertical section through the axis, the diameter of the knob may vary provided that it is not less than one and one half times nor more than twice the diameter of the neck. The diameter of the body may vary provided that it is not more than twice the diameter of the neck nor less than the diameter of the knob.

(5) In the hexagonal form of weight—

- (a) any horizontal section shall be a regular hexagon;
- (b) all the sides shall be flat,
- (c) the shortest distance across the base shall be not less than 80 per cent nor more than 120 per cent of the shortest distance across the top; and
- (d) the height shall not be less than 45 per cent nor more than 55 per cent of the shortest distance across the top or, if the base is smaller in area than the top, across the base.
- (h) In the disc form the weight shall be a circular disc the thickness of which is not less than one-sixth nor more than one-third of the diameter.

**Adjusting holes.**

35.(1) No metric weight of less than 20 grammes and no imperial weight of less than 1 ounce shall have an adjusting hole.

(2) No other weight shall have more than one adjusting hole.

(3) An adjusting hole shall be in the form of a cavity in a plane surface of the weight, and shall either be—

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- (a) undercut and plugged with lead; or
  - (b) closed by a plug or disc made of brass or steel.
- (4) Where an adjusting hole is closed with a plug or disc, the plug or disc shall be secured by a lead pellet driven into an undercut recess or, if the cavity is threaded, the thread.
- (5) No lead plug or pellet shall protrude from the surface of the weight.

#### **Marking.**

36.(1) All weights, other than wire weights, shall be marked with an indication of their purported mass. Metric weights of disc form shall be marked on both sides.

(2) The marking shall comprise figures indicating the number of units and words or an appropriate symbol or abbreviation to indicate the relevant unit. In the case of weights of disc form the figure shall be at least 4 mm high.

(3) No weight shall bear any marking other than—

- (a) the markings hereinbefore mentioned;
- (b) the name or mark of the maker;
- (c) the stamp applied by an inspector.

(4) Where a weight bears the name or mark of its maker, the height of the mark or lettering shall not exceed one half of the height of the figures showing its purported weight.

#### **Symbols, etc.**

37. The following symbols and abbreviations shall be used to indicate units of weight—

##### Metric

Kilogramme	kg, kilogram or kilog
gramme	g, gram or grm
milligramme	mg or milligram
carat (metric)	C.M.

##### Imperial

pound	lb
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ounce	oz
dram	dr
grain	gr
ounce troy	oz tr or oz troy

**Weights to be clean.**

38. Weights shall not be submitted for testing unless they are in a clean condition.

**Method of testing.**

39. An inspector shall test a weight by comparison with an appropriate local or working standard weight by the method of substitution on a balance or beam-scale or, if he considers it sufficient, by direct comparison.

**Margin of error.**

40. A weight shall not be passed as fit for use for trade if upon testing it is found—

- (a) to be too heavy by more than the relevant amount specified in Part III of Schedule 1;
- (b) to be light; or
- (c) not to comply with the requirements of this Part.

**Stamping.**

41. A weight which is passed as fit for use for trade shall be stamped upon the lead in the adjusting hole or, if it has no adjusting hole, upon its under surface or, if it is of disc form, on either of its flat surfaces.

**Obliteration of stamps.**

42.(1) Where a weight bearing the prescribed stamp is found by an inspector to differ from its purported weight by more than the relevant amount specified in Part III of Schedule 1 he shall either obliterate the stamp or serve upon the person in possession of the weight a notice requiring him to have it adjusted within 28 days.

(2) Where notice is served under the provisions of sub-regulation (1) and the weight is consequently retested after the expiration of that period and found to be outside the relevant limits of error the inspector shall obliterate the stamp on it.

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(3) Where a weight bearing the prescribed stamp is found by an inspector not to comply with the relevant requirements of these regulations, he shall obliterate the stamp on it.

(4) A stamp shall be obliterated by impressing on it a design in the form of a six-pointed star.

#### **PART VI.—WEIGHING INSTRUMENTS.**

##### **General application.**

43. Notwithstanding anything contained in Parts VII to XIV relating to weighing instruments of a particular type, class or description the provisions of this Part of these regulations shall have effect in relation to all weighing instruments to which these regulations apply.

##### **Makers name, etc.**

44.(1) Weighing instruments shall have their maker's name and their capacity conspicuously, legibly and durably marked thereon.

(2) Where units of measurement are marked on weighing instruments, they shall be marked either in full or by means of one of the abbreviations specified in regulation 37.

##### **Materials.**

45. All knife-edges and bearings in weighing instruments shall be of hard steel or agate or of other material approved by the Department; they shall be so fitted to allow the beam or steelyard indicator to move easily, and the knife-edges shall substantially bear upon the whole length of their working parts.

##### **Provision for adjustment.**

46.(1) All removable counterpoises and all sliding poises on weighing instruments shall contain an undercut adjusting hole or other means of adjustment, except where due to the size of the counterpoise or sliding poise an adjusting hole would be impracticable.

(2) Any loose material used in any such counterpoise or poise shall be securely enclosed therein.

##### **Instruments with removal parts.**

47. Weighing instruments with removable parts the removal of which affect their accuracy, shall be so constructed that they cannot be used if any of those parts are removed.

**Instruments with interchangeable parts.**

48. Where weighing instruments have interchangeable or reversible parts, the interchange or reversal thereof shall not affect the accuracy of the instrument.

**Graduations.**

49. All graduations on weighing instruments shall be so defined that the positions of all sliding poises or indicators are clearly readable.

**Testing.**

50.(1) Subject to sub-regulation (2) in testing any weighing instrument the inspector shall satisfy himself that—

- (a) it is properly balanced when unloaded;
- (b) the beam (if any) has sufficient room for oscillation and returns to the position of equilibrium when the load is removed;
- (c) the indicator (if any) returns to the zero mark or minimum graduation when the load is removed.

(2) Sub-regulation (1)(a) shall not apply in the case of a weighing instrument of a pattern in respect of which a certificate of approval has been granted.

**Instruments used in certain transactions.**

51.(1) Weighing instruments used in any of the following transactions—

- (a) in gold, silver or other precious metals,
- (b) in precious stones,
- (c) in jewellery,
- (d) in silk,
- (e) by retail in drugs or other pharmaceutical products, shall either—
  - (i) be balances, or

- (ii) being instruments other than balances, fall within the prescribed limits of error for beam scales marked “Class B” in Schedule 2.
- (2) Weighing instruments used in retail transactions in tobacco shall either—
- (a) be balances, or
  - (b) being instruments other than balances, fall within the prescribed limits of error for beam scales marked “Class B” or “Class C” in Schedule 2.

**Sensitiveness, of vibration weighing instruments.**

52.(1) Unless otherwise provided in these regulations, vibrating weighing instruments shall be tested for sensitiveness by loading the instrument with the maximum testing load with the beam or steelyard indicator in a horizontal position, and ascertaining that it moves with the addition of the weight to be added to test sensitiveness as specified in Part II of Schedule 2:

(2) In the case of beam scales and balances, the addition of the weight to either pan shall cause an appreciable movement of the beam.

(3) In the case of vibrating weighing instruments other than beam scales or balances, the addition of the weight shall cause the beam or steelyard indicator to rise or fall to the limit of its range of movement.

**Error of vibrating weighing instruments.**

53. Vibrating weighing instruments shall be tested for error by ascertaining the weight to be added thereto or removed therefrom in order to bring the beam or steelyard indicator of the instrument to a horizontal position when the instrument is loaded with the maximum testing load.

**Error of accelerating weighing instruments.**

54. Accelerating weighing instruments shall be tested for error by ascertaining the weight required just to keep the beam or steelyard indicator in a horizontal position on its stop or carrier and no more; and shall be further tested by ascertaining the weight required to bring back the beam or steelyard indicator from its position of greatest displacement to the horizontal position, the instrument being at all times fully loaded and truly balanced.

**Weighing instruments with price computing mechanism.**

55. In testing weighing instruments fitted with a price computing mechanism, the inspector shall in addition to testing at each numbered graduation satisfy himself that—

- (a) they indicate the price correctly; and
- (b) they comply with the requirements of these regulations in so far as they are applicable to the particular type, class or description of weighing instruments concerned.

**PART VII.—BEAM SCALES AND BALANCES.**

**Prohibitions.**

56. No beam scale shall—

- (a) be fitted with loaded weight pans;
- (b) if of a capacity of less than 100 kilograms be fitted with wooden scale boards.

**Attachment.**

57.(1) Any attachment for adjusting beam scales or balances shall be permanently affixed to the instrument and shall be so constructed that it cannot be readily tampered with.

(2) All beam scales with wooden scale boards shall be provided with an adjusting balance ball or box.

**Marking.**

58. All beam scales shall be indelibly marked either with the inscription “Class B” or with the inscription “Class C”.

**Testing.**

59.(1) In testing beam scales and balances, the inspector shall satisfy himself that, when the pans are loaded to half the capacity of the instrument and the knife-edges or bearings are moved laterally or backwards and forwards within their limits of movement, there is no appreciable difference in the indications of weight shown by the instrument.

(2) Beam scales and balances shall fall within the prescribed limits of error whether the load is on the middle or near the edges of the pans.

**Margin of error.**

60. No beam scale or balance shall be passed as fit for use for trade unless the error, if any, is less than that prescribed in Part I or Part II of Schedule 2.

**Stamping.**

61.(1) In the case of beam scales, the stamp shall be placed on the plug or stud provided for that purpose.

(2) In the case of balances, the stamp shall be placed either—

- (a) on the plug or stud on the base of the pillar; or
- (b) upon a special plate permanently and irremovably attached to the base of the instrument.

**PART VIII.—COUNTER MACHINES.****Prohibition.**

62. Counter machines shall not be constructed upon the accelerating weighing instrument principle.

**Construction.**

63.(1) Where the beam of a counter machine has two side members, they shall be connected together by not less than two cross bars; and the supports for the pans shall be of suitably rigid structure, such as crosses strengthened by straps.

(2) The centre forks of counter machines shall be so fixed that they cannot twist or get out of place.

**Materials.**

64. The bearing surfaces and points of contact of all stays, hooks and loops of counter machines shall be of hard steel or agate or of other material approved by the Department.

**Balancing box.**

65.(1) Where a counter machine is adjusted by means of a balancing box, the box shall be permanently fixed beneath the weights pan and shall only be large enough to contain loose material to an amount not exceeding 1 per cent of the capacity of the machine.

(2) No other means of adjustment shall be fitted, except where the machine is of a pattern for which a certificate of approval has been granted.

**Testing.**

66.(1) In testing counter machines, the inspector shall satisfy himself—

- (a) in the case of non-self-indicating machines, that the minimum movement of the beam from the horizontal in either direction is sufficient;
- (b) that, when the pans are loaded to half the capacity of the machine and the knife-edges or bearings are moved laterally or backwards and forwards within their limits of movement, there is no appreciable difference in the indications of weight shown by the instrument.

(2) When the goods pan is not in the form of a scoop, the machine shall indicate the same weight within half the prescribed limits of error if the centre of a load equal to half the capacity of the machine is placed on the goods pan anywhere within a distance from the centre equal to one-third of the greatest length of the pan, or, if the pan has a vertical side, against the middle of that side; the load on the weights pan being entirely on that pan but in any position on it.

(3) Where the goods pan is in the form of a scoop, the machine shall fall within the prescribed limits of error when a load equal to half the capacity of the machine is placed against the middle of the back of the scoop and a like load is placed in any position on the scoop; the load on the weights pan being entirely on that pan but in any position on it.

**Margin of error.**

67. No counter machine shall be passed as fit for trade unless the error, if any, is less than that prescribed in Part I and Part III of Schedule 2.

**Stamping.**

68. The stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the counter machine.

**PART IX.—SPRING BALANCES.**

**Construction.**

69. The extremity of the pointer of a spring balance shall not exceed one millimetre in width and shall not be more than three millimetres from the scale or dial.

**Graduations.**

70.(1) The distance between successive graduations on the scale of a spring balance shall not be less than the relevant distance specified in the following table :-

Capacity of instrument	Minimum space between graduations
(a) IMPERIAL SCALE	
Not more than 30lb.	1/16 in.
Over 30lb but not over 1 cwt.	1/12 in.
Over 1 cwt.	½in.
(b) METRIC SCALE	
Not more than 15 kg.	1.25 mm
Over 15 kg but not more than 50 kg.	2 mm
Over 50 kg.	2.5 mm

(2) Successive graduations on the scale of a spring balance shall not indicate a difference in weight exceeding the relevant amount specified in the following table:-

Capacity of instrument	Maximum weight corresponding to interval between successive graduations
(a) AS AN IMPERIAL INSTRUMENT	
110 lb or more.	1/200 of capacity
Under 100lb but not less than 60 lb.	4 oz
Under 60lb but not less than 40 lb.	2 oz
Under 40 lb but not less than 20 lb.	1 oz
Under 20 lb but not less than 8 lb	8 dr
Under 8 lb but not less than 2 lb.	4 dr
Under 2 lb but not less than 1 lb.	2 dr
(b) AS A METRIC INSTRUMENT	
100 kg or more.	1/200 of capacity
Under 100kg but not less than 50 kg.	200 g
Under 50 kg but not less than 30 kg.	100 g
Under 30 kg but not less than 20 kg.	50 g
Under 20 kg but not less than 6 kg,	20 g
Under 6 kg but not less than 1½ kg.	10 g

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Under 1½ kg but not less than 500 g.	5 g
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Capacity of spring balance	Maximum weight corresponding to interval between consecutive graduation.
500 grams.	3½ grams
1 kilogram to 3 kilograms.	7 grams
5 kilograms to 7 kilograms.	14 grams
10 kilograms to 15 kilograms.	28 grams
18 kilograms to 27 kilograms.	56 grams
45 kilograms and over.	1/200th of capacity

### Position of pointers.

71. Where the graduations commence at any point of the scale or dial other than at the zero indication, the position of the pointer when there is no load shall be clearly indicated by a zero mark.

### Range of adjustment.

72. Where spring balances are provided with an adjustable pointer, the range of adjustment shall not exceed 1 per cent of the capacity of the instrument.

### Testing.

73. Spring balances shall be tested at each numbered graduation and may also be tested at intermediate graduations.

### Indication of Weight.

74.(1) The case of a spring balance the pan of which is above the spring—

- (a) if the pan is not in the form of a scoop, the instrument shall indicate the same weight within half the prescribed limits of error if the centre of a load equal to half the capacity of the instrument is placed on the pan anywhere within a distance from the centre equal to one-third of the greatest length of the pan, or, if the pan has a vertical side, against the middle of that side;
- (b) if the pan is in the form of a scoop, the instrument shall fall within the prescribed limits of error when a load equal to half the capacity of the instrument is placed

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against the middle of the back of the scoop and again when a like load is placed in any position on the scoop.

(2) In the case of a spring balance the pan of which is below the spring, the instrument shall fall within the prescribed limits of error when a load equal to the capacity of the instrument is placed in any position on the pan.

#### **Margin of error.**

75. No spring balance shall be passed as fit for trade unless the error, if any, is less than that prescribed in Part I and IV of Schedule 2.

#### **Test of accuracy.**

76. Spring balances may be tested for efficiency or ability to recover by leaving on them for a period of 24 hours, a load equal to the capacity of the instruments and then, after the expiration of a further period of 4 hours, by testing for accuracy.

#### **No test for sensitiveness.**

77. Spring balances shall not be tested for sensitiveness.

#### **Stamping.**

78. The stamp shall be placed upon the plug or stud provided for that purpose, which wherever practicable shall pass through the scale or dial and the frame of the spring balance. The plug or stud shall be so supported as to avoid risk of injury to the instrument by stamping.

### **PART X.—STEELYARDS.**

#### **Construction.**

79. Steelyards shall be made of wrought iron or steel or of other material approved by the Consumer Protection Officer.

#### **Nature of steelyards.**

80. In the case of every steelyard—

- (a) the shank shall be straight;
- (b) each set of notches or graduations on the shank shall be cut in one plane and shall be at right angles to the shank;

- (c) there shall be fitted a stop or other device to prevent excessive oscillation of the shanks;
- (d) end fittings, sliding poises and suspending hooks shall not be readily removable;
- (e) the sliding poise shall be freely movable without risk of injury to the notches or graduations from constant use, and there shall be a stop to prevent it from travelling behind the zero graduation.

**Testing.**

81. Steelyards shall be tested at each numbered graduation by means of both increasing and decreasing loads.

**Margin of error.**

82. No steelyard shall be passed as fit for trade unless the error, if any, is less than that prescribed in Parts I and V of Schedule 2.

**Stamping.**

83. The stamp shall be placed upon the plug or stud provided for that purpose on the shoulder of the steelyard.

**PART XI.— DEAD-WEIGHT MACHINES.**

**Construction.**

84.(1) The bearing surfaces and points of contact of all stays, hooks, loops and adjustable slides on dead-weight machines shall be made of hard steel, and the knife-edges shall be so fitted as to be incapable of twisting.

(2) Adjustable slides shall be secured in position by means of lock nuts or other suitably secure devices.

**Goods platforms.**

85.(1) The goods platform of dead-weight machines shall not exceed in length the length of the beam, or in width double the width of the beam. Folding wings shall not increase such dimensions by more than one-third in either direction.

(2) The platforms shall be made of metal or hard wood.

**Movement.**

86. The minimum movement of the beam from the horizontal in dead-weight machines. shall be as follows—

- (a) if the machine is of the vibrating weighing instrument type, 16 millimetres, in both directions; or
- (b) if the machine is of the accelerating weighing instrument type, 22 millimetres in one direction only.

**Balancing material.**

87. Loose balancing material for the adjustment of deadweight machines shall be contained in a balancing box permanently fixed beneath one platform, and its weight shall not exceed  $\frac{3}{4}$  per cent of the capacity of the machine. Any other balancing material shall be in one piece and shall be permanently attached to the machine.

**Testing.**

88.(1) Dead-weight machines shall indicate the same weight within half the prescribed limits of error when a load equal to one-quarter of the capacity of the machine is placed successively at the middle of the front (and back) of each platform and centrally over the knife-edges on each side of each platform.

(2) Except in the case of double machines, dead-weight machines shall also fall within the prescribed limits of error when a load equal to the capacity of the machine is uniformly distributed over each platform.

(3) Double machines shall also fall within the prescribed limits of error when a load equal to half the capacity of the machine is uniformly distributed over both goods platforms, a load equal to the capacity of the machine uniformly distributed over the weight platform.

**Margin of error.**

89. No dead-weight machine shall be passed as fit for trade unless the error, if any, is less than that prescribed in Parts I and VI of Schedule 2.

**Stamping.**

90. The stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the beam of the dead-weight machine.

**PART XII.—PLATFORM WEIGHING MACHINES AND WEIGHBRIDGES.****Construction.**

91.(1) The steelyard indicator of a platform weighing machine or weighbridge shall not incorporate any readily removable parts, except the support for the counterpoises.

(2) There shall be a stop or stops to prevent any sliding poise from travelling behind the zero mark.

(3) The indicating mechanism may be confined in a locked box or case, provided that the indications or graduations are clearly visible.

**Movement.**

92. The minimum movement from the horizontal of the steelyard indicator shall be as follows—

(a) in the case of a platform weighing machine—

- (i) if it is of the vibrating weighing instrument type, one centimetre in both directions;
- (ii) if it is of the accelerating weighing instrument type, 16 millimetres in one direction only;

(b) in the case of a weighbridge—

- (i) if it is of the vibrating weighing instrument type, 13 millimetres in both directions;
- (ii) if it is of the accelerating weighing instrument type, 19 millimetres in one direction only.

**Movable Parts.**

93. If a movable hutch, barrow, frame or bucket is used instead of an ordinary platform on platform machines and weighbridges, it shall form an essential part of the instrument without which the instrument cannot be balanced.

**Loose counterpoises.**

94.(1) Loose counterpoises for platform weighing machines and weighbridges shall be identified with the instrument to, which they relate by a number or other sufficient mark of identification, which shall be indelible. They shall also be marked with the weight, which they represent.

(2) Loose counterpoises, which are marked in units in the metric system shall be of hexagonal shape or other shape approved by the Department.

**Small portable platform weighing machines.**

95. In the case of a small portable platform weighing machine (commonly known as a bob-up weighing machine) the counterpoise shall not be threaded on to a pin rigidly attached to one end of the main lever, but shall either be used in a tray or pan suspended from a knife-edge bearing or be placed on a loose shackle.

**Balancing arrangement.**

96. The balancing arrangement for platform weighing machines and weighbridges, to compensate for daily wear and tear, shall have a range not exceeding  $\frac{1}{2}$  per cent of the capacity of the instrument and not less than  $\frac{1}{8}$  per cent in each direction, and it shall be securely attached to the instrument and actuated by a detachable key.

**Machines etc. fitted with dials.**

97. In the case of a platform weighing machine and a weighbridge which is fitted with dials—

- (a) all racks and pinions shall be made of hard metal;
- (b) the extremity of the pointer shall not be a greater distance than 5 millimetres from the dial, and shall meet but not obscure the graduations; and
- (c) the indicating mechanism and any cylinders or tanks containing liquid shall be protected from dust and from excessive variations of temperature.

**Testing of machines, etc. to be permanently fixed.**

98. A platform weighing machine which is to be permanently fixed in the position in which it is to be used and a weighbridge shall be tested passed as fit for use for trade and stamped only when completely erected ready for use and installed at the place where it is to be used.

**Testing.**

99. In testing a platform weighing machine or weighbridge, the inspector shall where practicable—

- (a) test the instrument at each numbered graduation up to and including one thousand kilograms, or such smaller amount as the last graduation on the steelyard indicator or dial may show; and
- (b) test all loose counterpoises, if any, relating to the instrument; and
- (c) test the instrument at each one thousand kilogram graduation; and, if necessary, introduce heavy material into the testing to enable the full capacity to be reached.

**Testing a machine fitted with a relieving gear.**

100.(1) In testing a platform weighing machine fitted with relieving gear, the inspector shall satisfy himself that—

- (a) the machine falls within the prescribed limits of error when it is put steadily out of and into gear; and
- (b) the plate or platform is entirely disengaged from its bearings when the machine is in relief.

(2) A platform weighing machine and a weighbridge shall indicate the same weight within half the prescribed limits of error when a load equal to one-quarter of the capacity of the instrument is placed successively in the centre and near each end or corner of the platform.

(3) A platform weighing machine and a weighbridge shall also fall within the prescribed limits of error when a load equal to the capacity of the machine is uniformly distributed over the platform.

**Margin of error of platform weighing machine.**

101. No platform weighing machine shall be passed as fit for trade unless the margin of error, if any, is less than that prescribed in Part I and Part VII of Schedule 2.

**Margin of error of weighbridge.**

102. No weighbridge shall be passed as fit as for trade unless the margin of error, if any, is less than that prescribed in Part VIII of Schedule 2.

**Stamping.**

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103.(1) On a platform weighing machine and a weighbridge fitted with dials, the stamp shall be placed on the plug or stud provided for that purpose on the housing of the instrument.

(2) On a platform weighing machine and a weighbridge not fitted with dials, the stamp shall be placed on the said plug or stud in a conspicuous position either on the shoulder or on the opposite end of the steelyard indicator.

#### **Loose counterpoises not to be stamped.**

104. Loose counterpoises for platform weighing machines and weighbridges shall not be stamped.

### **PART XIII.—CRANE WEIGHING MACHINES.**

#### **Protection of working parts.**

105. All working parts of crane weighing machines shall be protected from damp and dust.

#### **Construction.**

106.(1) The steelyard indicator on a crane weighing machine constructed upon the lever principle shall be rigid and may be made of special metal to resist atmospheric influences.

(2) The rack and pinion on a machine fitted with dials shall be made of hard metal.

#### **Range.**

107. The range of any balancing arrangement for a crane weighing machine shall not exceed 2 per cent of the capacity of the machine.

#### **Machines constructed upon hydraulic principles.**

108. A crane weighing machine constructed upon the hydraulic principle in the use of which it is necessary to twist the load hook in order to get a correct indication of weight, shall have a prominent notice to that effect permanently affixed to the machine.

#### **Testing.**

109. A crane weighing machine shall, if practicable, be tested at each numbered graduation up to the capacity of the machine.

#### **Not test for sensitiveness.**

110. A crane weighing machine fitted with dials shall not be tested for sensitiveness.

**Steelyard indicator.**

111. The steelyard indicator or pointer on a crane weighing machine shall move freely, and the pointer shall return to its initial starting point after the load has been removed.

**Margin of error.**

112. No crane weighing machine shall be passed as fit for trade unless the error, if any, is less than that prescribed in Parts I and IX of Schedule 2.

**Stamping.**

113. The stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the crane weighing machine.

**PART XIV.—AUTOMATIC WEIGHING MACHINES.**

**Construction.**

114. Subject to regulations 115 to 120 inclusive, every automatic weighing machine and its integral parts shall, as far as practicable, satisfy those requirements of these regulations which are applicable to the type, class or description of weighing instrument to which the machine most nearly relates.

**Beams.**

115. All beams of automatic weighing machines shall be identified with the machines to which they relate by means of a number or other sufficient mark of identification, which shall be indelible.

**Adjusting mechanism.**

116. Any adjusting mechanism on an automatic weighing machine shall be so secured and protected that it cannot readily be tampered with.

**Testing.**

117.(1) Subject to sub-regulation (2), every automatic weighing machine shall be subjected to the following test (hereinafter referred to as “test A”), that is to say—

- (a) by weighing consecutively on the machine 20 separate loads (hereinafter referred to as “test loads”) selected for the purpose by the inspector, and then re-weighing the same loads on another weighing instrument:

Provided that, if the inspector thinks fit, he may so weigh and re-weigh more than 20 separate loads of which any 20 separate loads consecutively so weighed and re-weighed may be treated as the test loads; or

- (b) in any case where this testing procedure is not practicable, by directly applying to the machine the appropriate working standard weights.

(2) In the case of a totalising weighing machine, the provisions of paragraph (a) of sub-regulation (1) shall apply as if for any reference to “20 separate loads” there were substituted a reference to “40 separate loads”, and in such case the test loads shall be made up as follows—

- (a) 10 loads each equal to the minimum load which the machine is constructed to weigh;
- (b) 10 loads each equal to the capacity of the machine; and
- (c) 20 loads each equal to the mean between the said minimum load and the load equal to the capacity of the machine.

**Machines in respect of which a certificate has been granted.**

118.(1) Subject to sub-regulation (3), in the case of an automatic weighing machine of a pattern in respect of which a certificate has been granted, if, in the course of carrying out test A in the manner specified in regulation 117 (1)(a), the weight of any of the test loads exceeds the purported weight of the load by more than 1/2 per cent of the said purported weight, the machine shall, when appropriate, be subjected to the further test (hereinafter referred to as “test B”) described in sub-regulation (2) of this regulation.

(2) For the purposes of test B, there shall be extracted from each of those test loads used in test A (the weight of which was found to exceed the relevant amount specified in sub-regulation (1) of this regulation) that single piece or item appearing to the inspector to be the largest single piece or item in the test load; and the machine shall then be subjected to test by re-weighing such test load as so modified on another weighing instrument.

(3) This regulation shall not apply to an automatic weighing machine of a capacity of 5 kilograms or more, or to an automatic weighing machine for use only for weighing solid fuel or for use only for weighing potato crisps, or to a totalising weighing machine.

**Margin of error.**

119. No automatic weighing machine shall be passed as fit for trade unless the error, if any, is less than that prescribed in Parts I and X of Schedule 2.

**Stamping.**

120. The stamp shall be placed on the plug or stud provided for that purpose on a conspicuous part of the automatic weighing machine.

## SCHEDULE 1.

## PRESCRIBED LIMITS OF ERROR UPON THE TESTING OF MEASURES AND WEIGHTS.

In this Schedule, the abbreviations employed refer to units of measurement as follows:

<i>imperial</i>	<i>Metric</i>
ft-foot	m-metre
gal-gallon	mm-millimetre
qt--quart	
pt-pint	
fl. oz-fluid ounce	

## PART I. –LINEAR MEASURES.

1. The prescribed limits of error for the passing of linear measures as fit for use for trade shall be the following:–

(a) Imperial

Purported length of the measure.	Limit of error in inches.
50 ft or more	0.6
10 ft, 20 ft or 33 ft.	0.4
less than 10 ft but more than 3 ft	0.1
3 ft or less	0.05

(b) Metric

Purported length of the measure.	Limit of error.
50 m	20 mm
30 m or 20 m	15 mm
10 m, 5m, 2m, or 1.5 m	at the rate of 0.5 mm per 0.5 m
1 m or less	1 mm

2. The limits of error as respects the obliteration of stamps shall be four times the relevant limits specified in the foregoing Table.

PART II.—CAPACITY MEASURES.

1. (1) The prescribed limits of error for capacity measures in relation to the passing of any such measure as fit for use for trade shall be the appropriate amount specified in paragraph 2 or 3, as the case may be, of this Part.

(2) The prescribed limits of error for capacity measures in relation to the obliteration of the stamp on any such measure shall be—

- (a) in the case of a capacity measure, other than an apothecaries measure—
  - (i) if the error found on testing is in deficiency, an amount equal to half the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade;
  - (ii) if the error so found is in excess, an amount equal to the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade;
- (b) in the case of an apothecaries measure (and whether the error found on testing is in deficiency or excess), an amount equal to the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade.

2. Imperial System Liquid Measure

Purported capacity	Error in excess only fl. oz.
$\frac{1}{6}$ , $\frac{1}{5}$ or $\frac{1}{4}$ gill	0.0625
$\frac{1}{3}$ , $\frac{2}{5}$ or $\frac{1}{2}$ gill, 4 fl oz	0.125
1 gill, 6 fl oz $\frac{1}{8}$ pt	0.25
8 fl oz or $\frac{1}{2}$ pt	0.375
1 pt	0.5
1 qt or $\frac{1}{2}$ gall	1.0
1 to 3 gal (inclusive)	2.0
4 to 7 gal (inclusive)	3.0
8 to 19 gal (inclusive)	5.0
20 to 32 gal (inclusive)	10.0
33 to 64 gal (inclusive)	15.0

- (i) In the case of conical-shaped measures made of metal, the foregoing amounts of error (as tabulated) shall be decreased to half the said amounts.

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- (ii) In the case of milk churns of purported values of 4 to 32 gallons inclusive, the foregoing amounts of error (as tabulated) shall be increased to double the said amounts.
- (iii) In the case of measures made of enamelled-metal, glass or earthenware where the purported value is defined by the brim, and of a purported value exceeding half a pint, the foregoing amounts of error (as tabulated) shall be increased to double the said amounts and of a purported value of half a pint, the prescribed limit of error shall be half a fluid ounce in excess only.
- (iv) In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

#### Dry Measures

Purported capacity	Error in excess only
1/2pt	0.625 fl oz
1 pt	0.25 gill
1 qt	0.5 gill
1/2 gal	1.0 gill
1 gal or 2 gal	1.5 gill
4 gal or 8 gal	0.5 pt

### 3. Metric System

- (a) Liquid measures made of metal, other than apothecaries measures.

purported value	Error in excess only
	millilitres
1 millilitre	0.05
2 millilitres	0.1
5 “	0.25
10 “	0.5
20 “	1
25 “	1
50 “	2
100 “	2
200 “	5
250 “	5
500 “	10
1 litre	15
2 litres	25

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2½ “	25
5 “	50
10 “	75
20 “	100

In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

- (b) Liquid measures made of earthenware, glass or enamelled metal, and measures made of other materials approved by the Department other than apothecaries measures;

Purported value	Error in excess only
	millilitres
200 millilitres	10
250 “	10
500 “	25
1 litre	50
2 litres	100
2½ “	100
5 “	200

In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

- (c) Apothecaries measures.

Approximate internal diameter of measure in millimetres at the graduation tested.	Error in excess or in deficiency.
millimetres	millimetres
10	0.05
20	0.15
30	0.3
40	0.4
50	0.6
60	0.6
70	0.8
80	0.8
90	1

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In the case of graduated measures made of glass in the form of burettes, the foregoing amounts of error shall be decreased to half the said amounts.

(d) Dry Measures.

Purported value	Error in excess only
	millilitres
200 millilitres	10
500 “	25
1 litre	50
2 litres	100
2½ “	100
5 “	150
10 “	250
20 “	300

#### PART III. –WEIGHTS.

1. Metric weights-

(a) The hexagonal form

Purported mass of the weight.	Permitted error.
2 kg	600 mg
1 kg	400 mg
500 g	250 mg
200 g	250 mg
100 g	250 mg

(b) All other metric weights (other than carat (metric) weights)-

Purported mass of the weight.	Permitted error
5 kg or more	160 mg per kg of the purported mass
2 kg or 1 kg	200 mg per kg of the purported mass
500 g	100 mg

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200 g	50 mg
100 g or 50 g	30 mg
not more than 20 g nor less than 10 g	20 mg
5 g or 4 g	10 mg
3 g, 2 g or 1 g	5 mg
not more than 500 mg but more than 20 mg	2 mg
20 mg	1 mg
10 mg	0.5 mg
5 mg or 2 mg	0.2 mg
1 mg	0.1 mg

(c) Carat (metric) weights

Purported mass of the weight.	Permitted error
500 CM or 200 CM	5 mg
100 CM or 50 CM	2 mg
Not more than 20 CM but more than 0.5 CM	1 mg
Not more than 0.5 CM but more than 0.1 CM	0.5 mg
0.1 CM or less	0.2 mg

2. Imperial Weights–

(a) Avoirdupois weights

Purported mass of the weight.	Permitted error
56 lb	50 gr
50 lb	40 gr
28 lb	30 gr
20 lb or 14 lb	20 gr
10 lb	16 gr
7 lb, 5 lb or 4 lb	10 gr
2 lb 6 gr	6 gr
1 lb, 8 oz or 4 oz	4 gr
2 oz or 1 oz	1 gr

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less than 1 oz	0.5 gr
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(b) Grain weights

<b>Purported mass of the weight.</b>	<b>Permitted error</b>
more than 10 gr	0.05 gr
not more than 10 gr but more than 0.3 gr	0.03 gr
0.2 gr	0.01 gr
0.1 gr	0.005 gr
0.05 gr or 0.03 gr	0.003 gr
0.02 gr	0.002 gr
0.01 gr	0.001 gr

(c) Troy weights

<b>Purported mass of the weight.</b>	<b>Permitted error</b>
500, 400 or 300 oz tr	4 gr
200 or 100 oz tr	3 gr
50 or 40 oz tr	2 gr
30 or 20 oz tr	1 gr
10 oz tr	0.5 gr
5, 4 or 3 oz tr	0.3 gr
2 or 1 oz tr	0.2 gr
0.5 oz tr, 0.4 oz tr or 0.3 oz tr	0.1 gr
not more than 0.2 oz tr but more than 0.03 oz tr	0.05 gr
0.03 oz tr or less	0.03 gr

**SCHEDULE 2.**

**PRESCRIBED LIMITS OF ERROR ON THE TESTING OF  
WEIGHING INSTRUMENTS.**

**PART I.—GENERAL.**

**1.** Subject to paragraphs 2 and 3 of this Part of this Schedule, the prescribed limits of error for weighing instruments shall be those specified in Parts II to X of this Schedule:

Provided that in the case of any weighing instrument of a capacity not so specified, the prescribed limits of error shall be the amounts proportionate to those so specified for an instrument of the same type, class or description.

**2.** In the case of any weighing instrument which weighs in units of the metric system and for which no limits of error are specified in terms of those units, the prescribed limits of error shall be the amounts in terms of metric units equivalent to those specified in terms of imperial units in the relevant Part of this Schedule with respect to an instrument of the same capacity, type, class or description.

**3.** In the case of any weighing instrument of the self-indicating or semi-self-indicating type, the prescribed limit of error, in excess or in deficiency, shall be either—

- (a) the appropriate amount specified in the relevant Part of this Schedule for the instrument concerned; or
- (b)
  - (i) in relation to the obliteration of stamps, the amount corresponding to the smallest interval between consecutive graduations on the scale or dial of the instrument;
  - (ii) upon passing as fit for use for trade, one half of the said amount.

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## PART II.—BEAM SCALES AND BALANCES.

## 1. Beam scales marked “Class B”.

Capacity of instrument	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 ounce	1/5 grain	3/5 grain	1/5 grain	2/5 grain
8 ounces	1 grain	3 grains	1 grain	2 grains
1 pound	1 “	3 “	1 “	2 “
2 pounds	1½ grains	4½ grains	2 grains	4 “
4 “	3 “	9 “	4 “	8 “
7 “	4 “	12 “	6 “	12 “
10 “	6 “	18 “	9 “	18 “
14 “	8 “	24 “	12 “	24 “
28 “	15 “	45 “	22 “	44 “
56 “	25 “	75 “	40 “	80 “
112 “	1½ drams	4½ drams	2½ drams	5 drams
224 “	2½ “	7½ “	3½ “	7 “
Above 2 hundred-weight	Add ½ dram for each hundred-weight of capacity	Add 1½ drams for each hundred-weight of capacity	Add 1 dram for each hundred-weight of capacity	Add 2 drams for each hundred-weight of capacity

## 2. Beam scales marked “Class C”

Capacity of instrument	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 ounce	3/5 grain	1 1/5 grain	3/5 grain	1 1/5 grain
8 ounces	3 grain	6 grains	3 grain	6 grains
1 pound	3 “	6 “	3 “	6 “
2 pounds	4½ grains	9 “	6 “	12 “
4 “	9 “	18 “	12 “	24 “
7 “	12 “	24 “	18 “	36 “
10 “	18 “	36 “	27 “	54 “

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14 “	24 “	48 “	36 “	72 “
28 “	45 “	90 “	66 “	132 “
56 “	75 “	150 “	120 “	240 “
112 “	4½ drams	9 drams	7½ drams	15 drams
224 “	7½ “	15 “	10½ “	21 “
Above 2 hundred-weight	Add 1½ drams for each hundred weight of capacity	Add 3 drams for each hundred-weight of capacity	Add 3 drams for each hundred-weight of capacity	Add 6 drams for each hundred-weight of capacity

### 3. Balances

Capacity of instrument	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 ounce	1/20 grain	3/20 grain	1/10 grain	1/5 grain
8 ounces	1/10 grain	3/10	1/5 grain	2/5
7 pound	½“	1½ grains	1 “	2 grains
56 “	1½“	4½ “	2 grains	4 “

### PART III.-COUNTER MACHINES

Capacity of machines	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 pound	20 grains	60 grains	30 grains	60 grains
2 pounds	28 “	84 “	1\$ drams	3 drams
4 “	40 “	120 “	2 “	4 “
7 “	2 drams	6 drams	3 “	6 “
10 “	2½ “	7½ “	3½ “	7 “
14 “	3 “	9 “	4½ “	9 “
28 “	4 “	12 “	6 “	12 “
56 “	6 “	18 “	9 “	18 “
1 hundred-weight	8 “	24 “	16 “	32 “

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PART IV.—SPRING BALANCES

Capacity of spring balance	Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps
1 pound	30 grains	60 grains
2 pounds	1½ drams	3 drams
3 “	1½ “	3 “
4 “	2 “	4 “
5 “	2½ “	5 “
6 “	2½ “	5 “
7 “	3 “	6 “
10 “	3½ “	7 “
11	3½ “	7 “
12	4 “	8 “
13	4 “	8 “
14	4½ “	9 “
15	4½ “	9 “
20	5 “	10 “
21	5 “	10 “
22	5 “	10 “
23	5½ “	11 “
24	5½ “	11 “
25	5½ “	11 “
26	5½ “	11 “
27	6 “	12 “
28	6 “	12 “
29	6 “	12 “
30	6 “	12 “
40 pounds and above	The weight corresponding to \$ of the interval between consecutive graduations	The weight corresponding to ½ of the interval between consecutive graduations.

PART V.—STEELYARDS

	Weight to be added to test sensitiveness when fully loaded	Error in excess or in deficiency when fully loaded.

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Capacity of steelyard				
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
56 pounds	12 drams	36 drams	18 drams	36 drams
1 hundred weight	1 ounce	3 ounces	2 ounces	4 ounces
3 “	2 ounces	6 “	4 “	8 “
5 “	3 “	9 “	6 “	12 “
10 “	4 “	12 “	8 “	16 “
20 “	6 “	18 “	12 “	24 “
10 “	10 “	30 “	20 “	40 “
30 “	13 “	39 “	26 “	52 “
40 “	16 “	48 “	32 “	64 “
50 “	20 “	60 “	40 “	80 “

### PART VI.—DEAD-WEIGHT MACHINES

Capacity of machine	Vibrating weighing instruments			
	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 hundred weight	½ ounce	1½ ounces	1 ounce	2 ounces
3 “	1 “	3 “	2 ounces	4 “
5 “	1½ “	4½ “	3 “	6 “
7 “	2 “	6 “	4 “	8 “
10 “	3 “	9 “	6 “	12 “
20 “	5 “	15 “	10 “	20 “
30 “	6½ “	19½ “	13 “	26 “
40 “	8 “	24 “	16 “	32 “
50 “	10 “	30 “	20 “	40 “

Accelerated weighing instruments	
Error in excess or in deficiency when fully loaded.	Weight required to bring back the beam from position of greatest

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Capacity of machine			displacement when fully loaded.
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade
1 hundred weight	1 ounce	2 ounces	2 ounces
3 “	2 ounces	4 “	4 “
5 “	3 “	6 “	6 “
7 “	4 “	8 “	8 “
10 “	6 “	12 “	12 “
20 “	10 “	20 “	20 “
30 “	13 “	26 “	26 “
40 “	16 “	32 “	32 “
50 “	20 “	40 “	40 “

**PART VII—PLATFORM WEIGHING MACHINES**

Capacity of machine	Vibrating weighing instruments			
	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 hundred weight	½ ounce	1½ ounces	1 ounce	2 ounces
3 “	1 “	3 “	2 ounces	4 “
5 “	1½ “	4½ “	3 “	6 “
7 “	2 “	6 “	4 “	8 “
10 “	3 “	9 “	6 “	12 “
20 “	5 “	15 “	10 “	20 “
30 “	6½ “	19½ “	13 “	26 “
40 “	8 “	24 “	16 “	32 “
50 “	10 “	30 “	20 “	40 “

Capacity of machine	Accelerated weighing instruments		Machines with dials
	Error in excess or in deficiency when fully loaded.	Weight required to bring back the steelyard indicator from position of greatest displacement when fully loaded must not exceed—	Error in excess or in deficiency when fully loaded.

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	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	Upon passing as fit for trade	In relation to the obliteration of stamps
1 hundred weight	1 ounce	2 ounces	2 ounces	2 ounces	4 ounces
3 “	2 ounces	4 “	4 “	4 “	8 “
5 “	3 “	6 “	6 “	6 “	12 “
7 “	4 “	8 “	8 “	8 “	16 “
10 “	6 “	12 “	12 “	12 “	24 “
20 “	10 “	20 “	20 “	20 “	40 “
30 “	13 “	26 “	26 “	26 “	52 “
40 “	16 “	32 “	32 “	32 “	64 “
50 “	20 “	40 “	40 “	40 “	80 “

### PART VIII.—WEIGHBRIDGES

Capacity of instrument	Accelerated weighing instrument without dials		Instrument with dials		
	Error in excess or in deficiency when fully loaded.	In relation to the obliteration of stamps	Weight required to bring back the steelyard indicator from position of greatest displacement when fully loaded must not exceed—	Error in excess or in deficiency when fully loaded.	
				Upon passing as fit for trade	In relation to the obliteration of stamps
1 ton	1\$ pounds	3 pounds	4 pounds	3 pounds	6 pounds
2 tons	2 “	4 “	5 “	4 “	8 “
5 “	4 “	8 “	10 “	8 “	16 “
10 “	6 “	12 “	15 “	12 “	24 “
20 “	10 “	20 “	25 “	20 “	40 “
25 “	12 “	24 “	30 “	24 “	48 “
30 “	13\$ “	27 “	34 “	27 “	54 “
35 “	15 “	30 “	37 “	30 “	60 “
40 “	16 “	32 “	40 “	32 “	64 “
50 “	18 “	36 “	45 “	36 “	72 “
75 “	23 “	46 “	58 “	46 “	92 “
100 “	28 “	56 “	70 “	56 “	112 “
200 “	42 “	84 “	105 “	84 “	168 “

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Capacity of machine	Vibrating weighing instruments without dials			
	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 ton	1½ pounds	4½ pounds	1½ pounds	3 pounds
2 tons	2 “	6 “	2 “	4 “
5 “	1½ “	10½ “	4 “	8 “
10 “	2 “	15 “	6 “	12 “
20 “	3 “	21 “	10 “	20 “
25 “	5 “	24 “	12 “	24 “
30 “	6½ “	25½ “	13½ “	27 “
35 “	8 “	27 “	15 “	30 “
40 “	10 “	28½ “	16 “	32 “
50 “	15 “	30 “	18 “	36 “
75 “	16 “	32 “	23 “	46 “
100 “	18 “	36 “	28 “	56 “
200 “	23 “	54 “	42 “	84 “

**PART IX.—CRANE WEIGHING MACHINES.****1. Crane weighing machines constructed upon other than the hydraulic principle.**

Capacity of machine	Machine with steelyard indicators			
	Weight to be added to test sensitiveness when fully loaded		Error in excess or in deficiency when fully loaded.	
	Upon passing as fit for trade	In relation to the obliteration of stamps	Upon passing as fit for trade	In relation to the obliteration of stamps
1 hundred-weight	½ ounce	1½ ounces	1 ounce	2 ounces
5 “	1½ ounces	4½ “	3 ounces	6 “
10 “	3 “	9 “	6 “	12 “
1 ton	1½ pounds	4½ pounds	1½ pounds	3 pounds
2 tons	2 “	6 “	2 “	4 “
5 “	3½ “	10½ “	4 “	8 “
10 “	5 “	15 “	6 “	12 “
20 “	7 “	21 “	10 “	20 “

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25 “	8 “	24 “	12 “	24 “
30	8½ “	25½ “	13½ “	27 “
35	9 “	27 “	15 “	30 “
40	9½ “	28½ “	16 “	32 “
50	10 “	30 “	18 “	36 “
75	12 “	36 “	23 “	46 “
100	14 “	42 “	28 “	56 “

2. Crane weighing machines constructed upon other than the hydraulic principle. An amount equal to one-half of the weight represented by the interval between consecutive graduations.

1. Crane weighing machines constructed upon other than the hydraulic principle.

Capacity of machine	Machines with dials	
	Error in excess or in deficiency when fully loaded	
	Upon passing as fit for trade	In relation to the obliteration of stamps
1 hundredweight	2 ounces	4 ounces
5 “	6 “	12 “
10 “	12 “	1½ pounds
1 ton	3 pounds	6 “
2 tons	4 “	8 “
5 “	8 “	16 “
10 “	12 “	24 “
20 “	20 “	40 “
25 “	24 “	48 “
30 “	27 “	54 “
35 “	30 “	60 “
40 “	32 “	64 “
50 “	36 “	72 “
75 “	46 “	92 “
100 “	56 “	112 “

2. Crane weighing machines constructed upon other than the hydraulic principle. An amount equal to one-half of the weight represented by the interval between consecutive graduations.

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Description of machine	Capacity of machine	Error in relation to the passing as fit for use for trade			
		For the purpose of test A		For the purpose of test B	
		When tested by means of test loads	When tested by means of the direct application of appropriate weights		
Column 1	Column 2	Column 3	Column 4	Column 5	
All automatic weighing machines other than those hereinafter described in columns 1 and 2 of this table	Under 10 pounds	½ per cent in excess only, of the purported weight of each test load	Prescribed limit of error applicable to the type, class or description of the weighing instrument to which the machine most nearly relates.	½ per cent in excess only, of the purported weight of each test load	
	10 pounds or more	½ per cent in excess only, of the purported weight of each test load		Test not applicable.	
Automatic weighing machines for use only for weighing grain	10 pounds or more	½ per cent in excess only, of the purported weight of each test load		Prescribed limit of error applicable to the type, class or description of the weighing instrument to which the machine most nearly relates.	Test not applicable.
Automatic weighing machines for use only for weighing solid fuel	2 hundred-weight or less	2 per cent in excess only, of the purported weight of each test load			
Automatic weighing machines for use only for weighing potato crisps	any capacity	20 per cent in excess only, of the purported weight of 20 test load (and no error in the purported weight of any of those test load)			
Totalising weighing machines	any capacity	½ per cent in excess only, of the total purported weight of 40 test loads			

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Description of machine	Capacity of machine	Error in relation to the obliteration of stamps		
		For the purpose of test A		For the purpose of test B
		When tested by means of test loads	When tested by means of the direct application of appropriate weights	
Column 1	Column 2	Column 3	Column 4	Column 5
All automatic weighing machines other than those hereinafter described in columns 1 and 2 of this table	Under 10 pounds	1 per cent in excess only, of the purported weight of each test load	Prescribed limit of error applicable to the type, class or description of the weighing instrument to which the machine most nearly relates.	1 per cent in excess only, of the purported weight of each test load
	10 pounds or more	1 per cent in excess only, of the purported weight of each test load		Test not applicable.
Automatic weighing machines for use only for weighing grain	10 pounds or more	½ per cent in excess only, of the purported weight of each test load		
Automatic weighing machines for use only for weighing solid fuel	2 hundredweight or less	2 per cent in excess only, of the purported weight of each test load		
Automatic weighing machines for use only for weighing potato crisps	any capacity	20 per cent in excess only, of the purported weight of 20 test load (and no error in the purported weight of any of those test load)		
Totalising weighing machines	any capacity	1 per cent in excess only, of the total purported weight of 40 test loads		